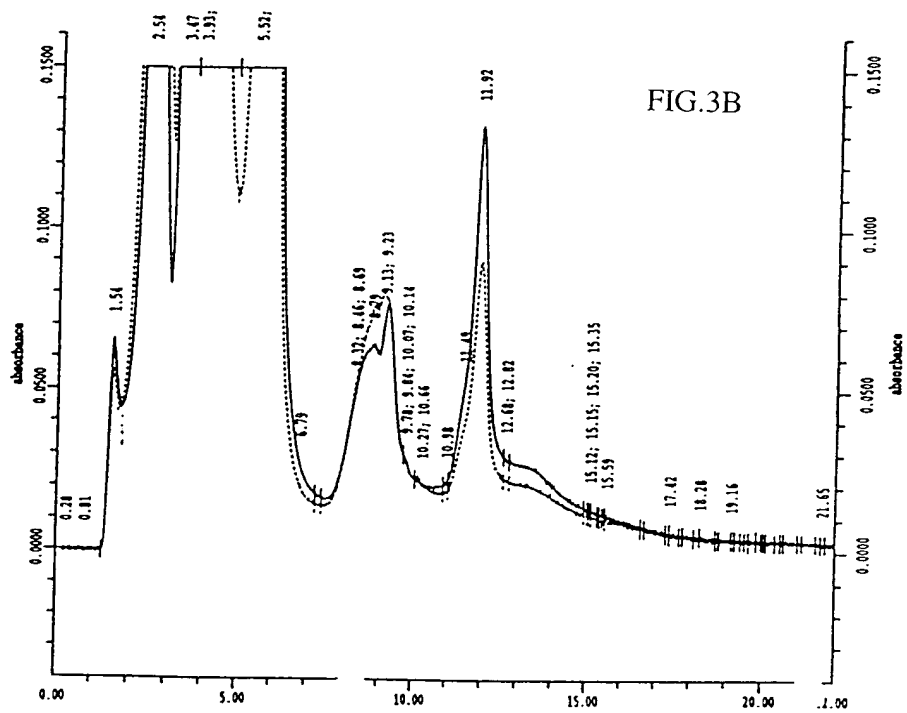
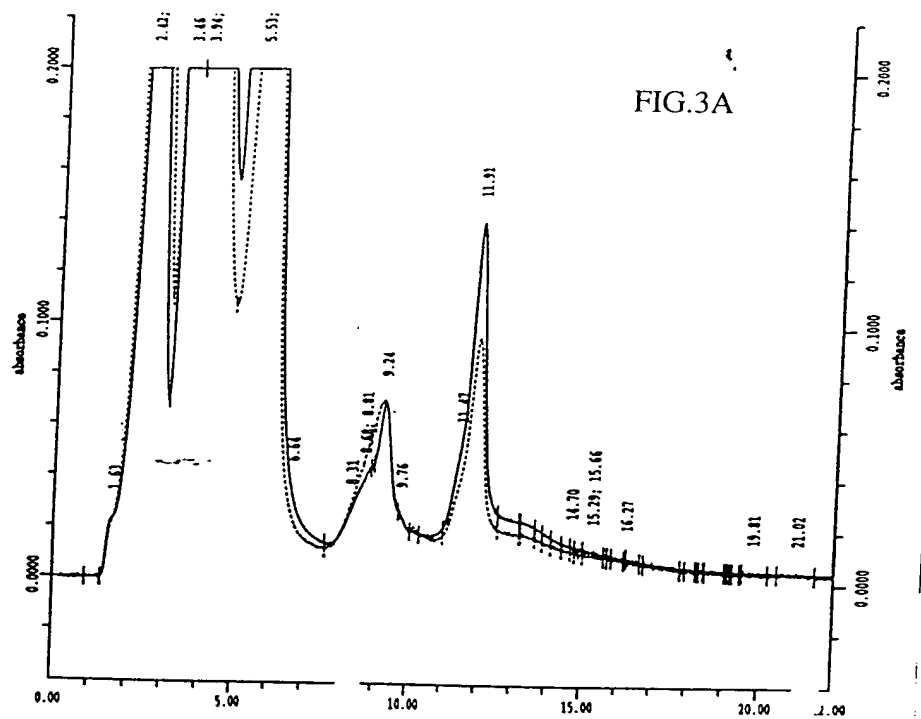


FIG. 2



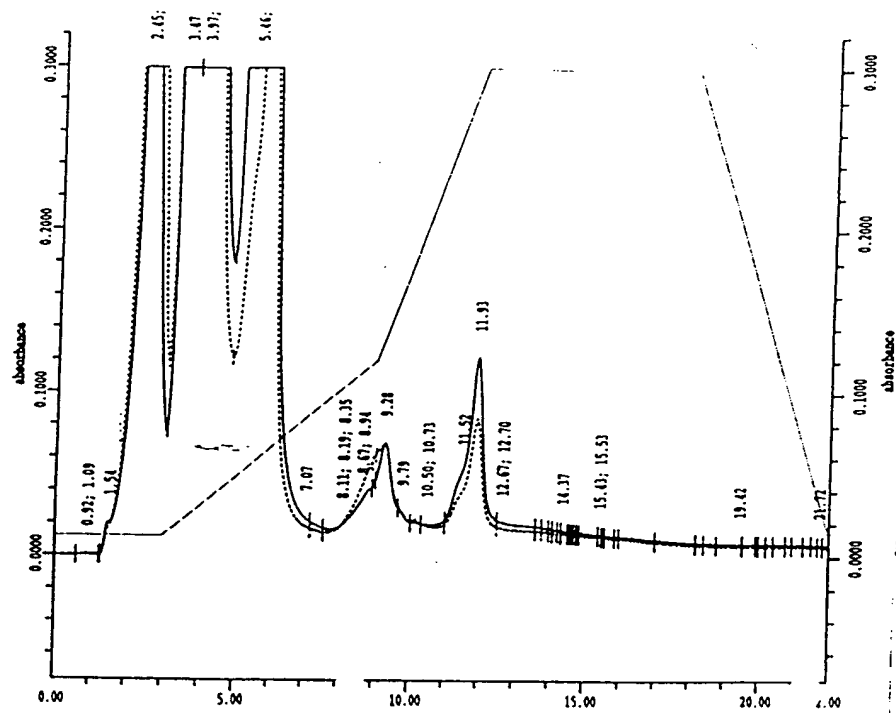


FIG.3C

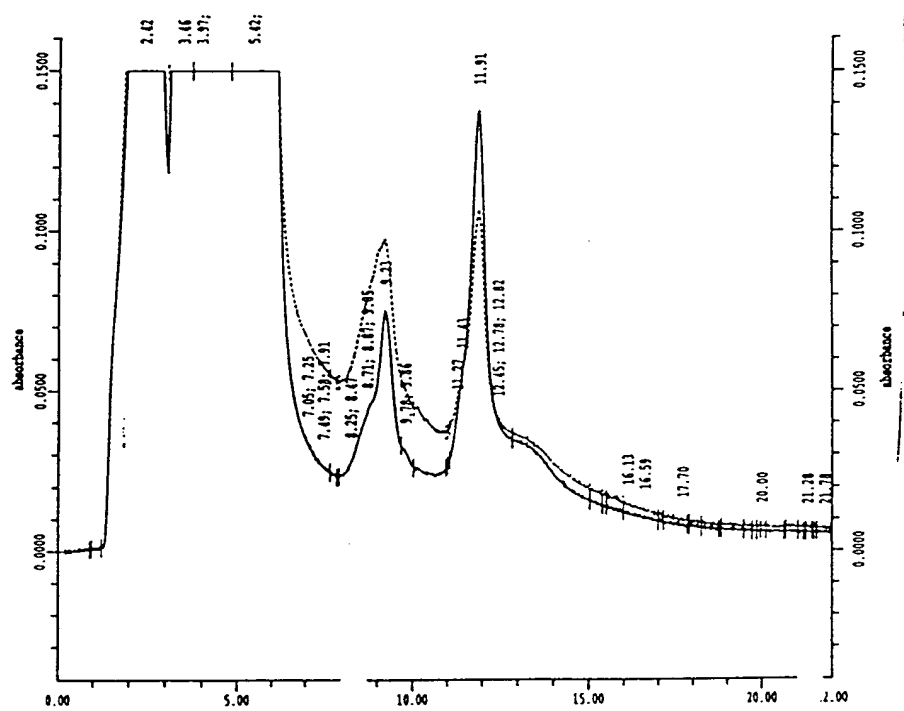


FIG.3D

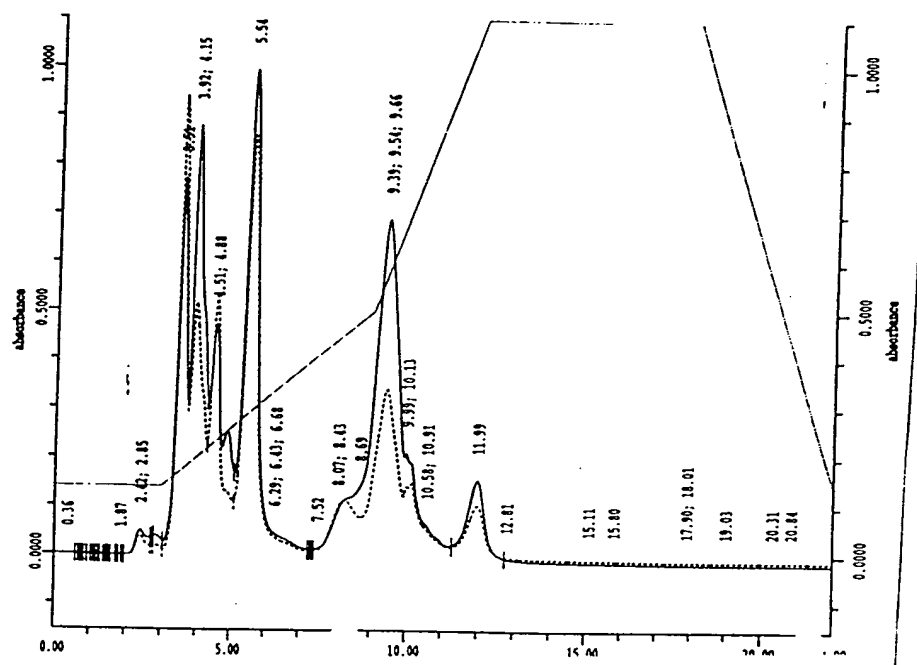
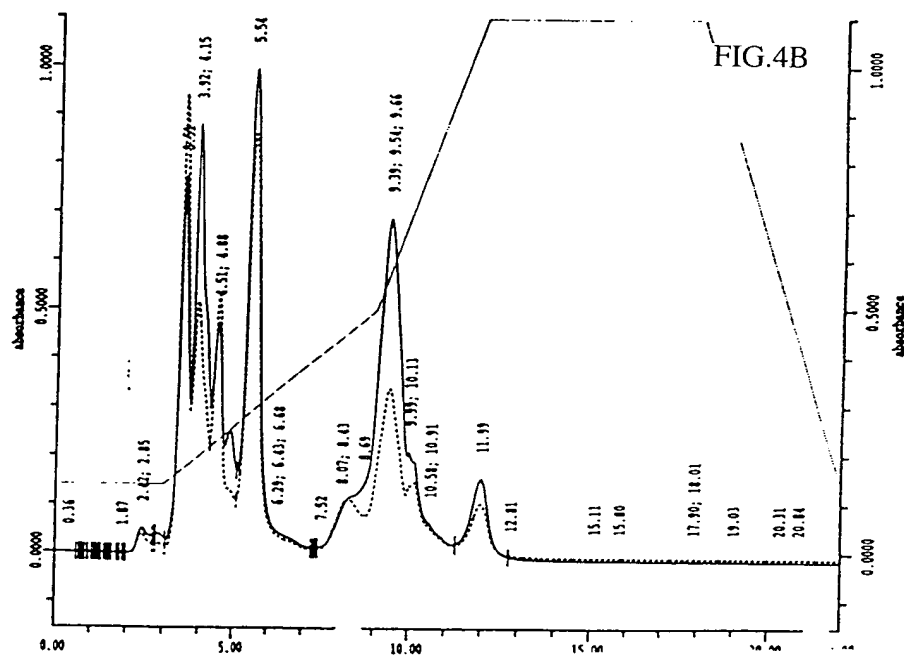
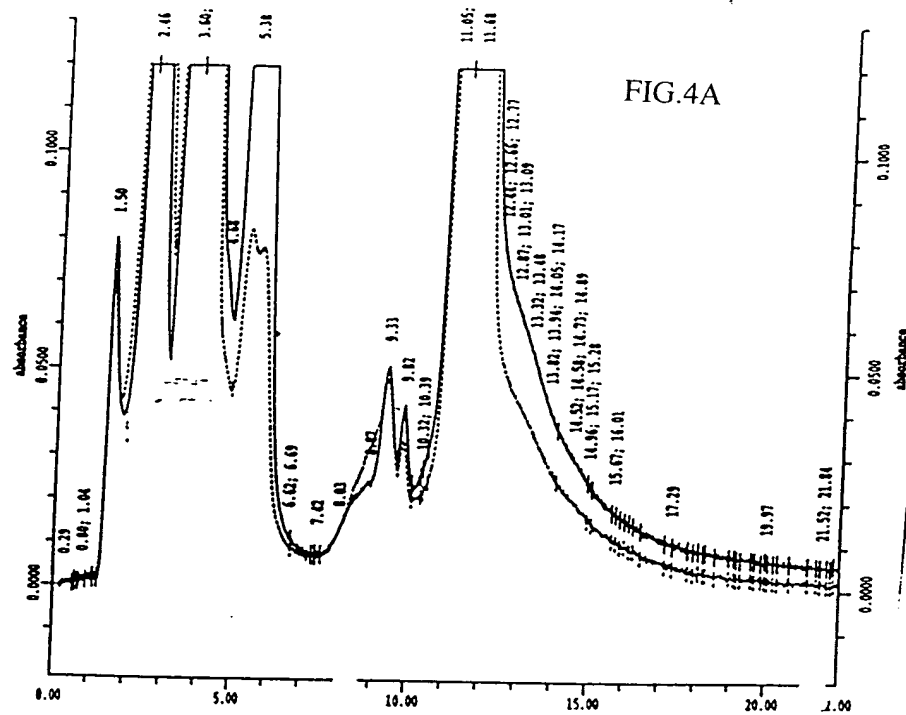


FIG.3E



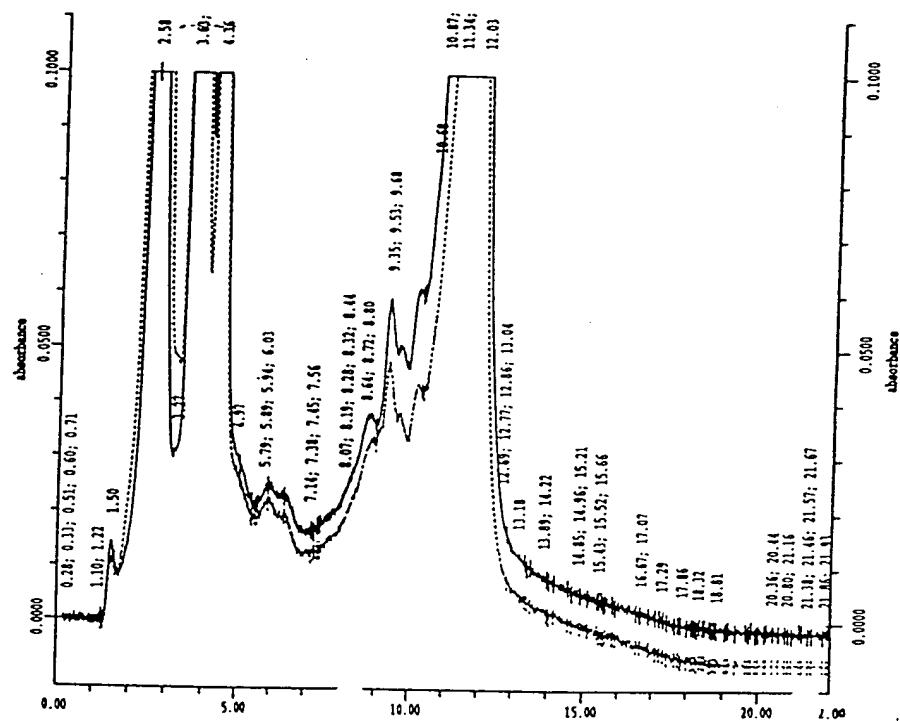


FIG.5

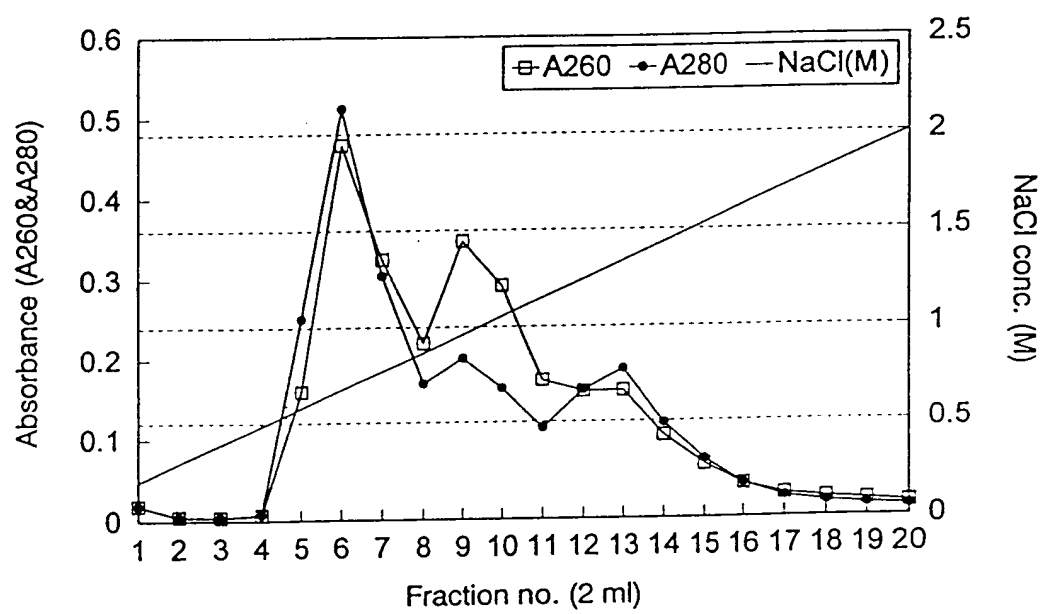


FIG.6

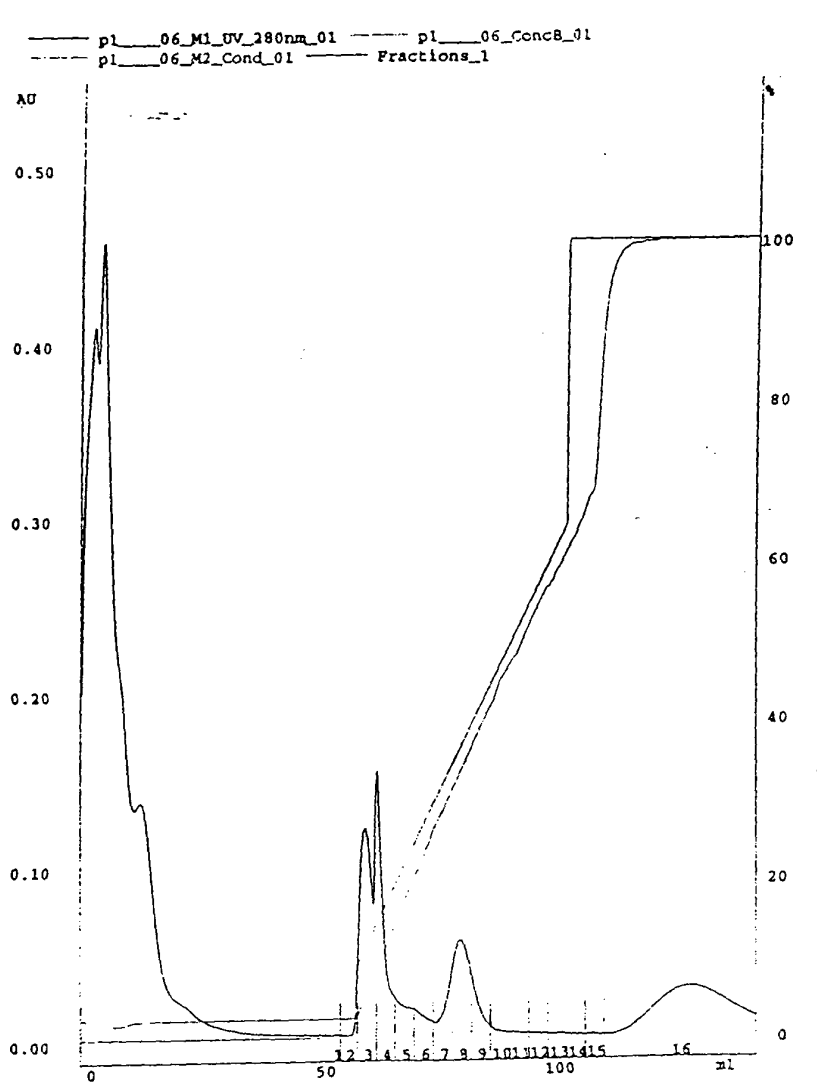


FIG.7

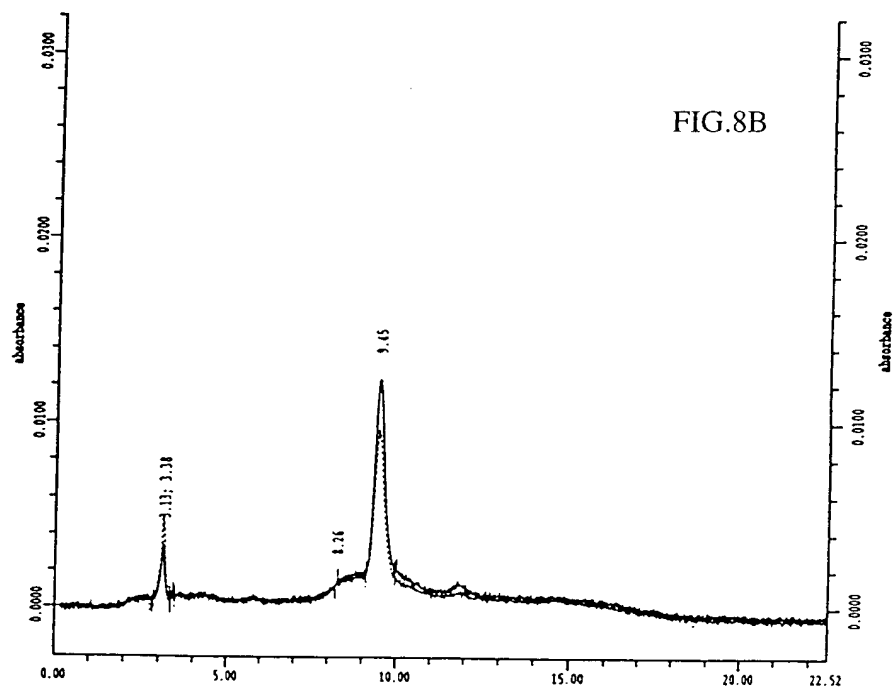
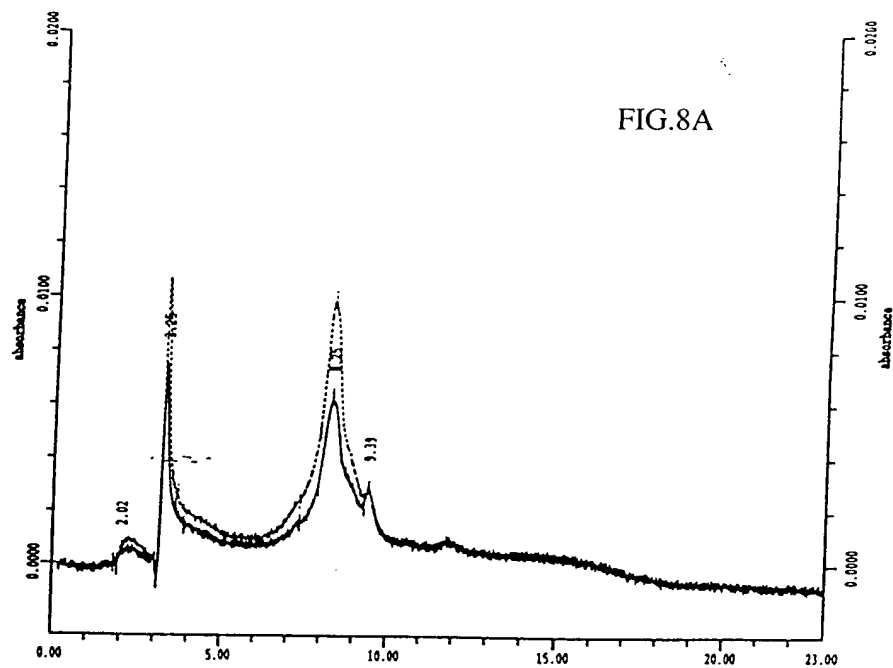
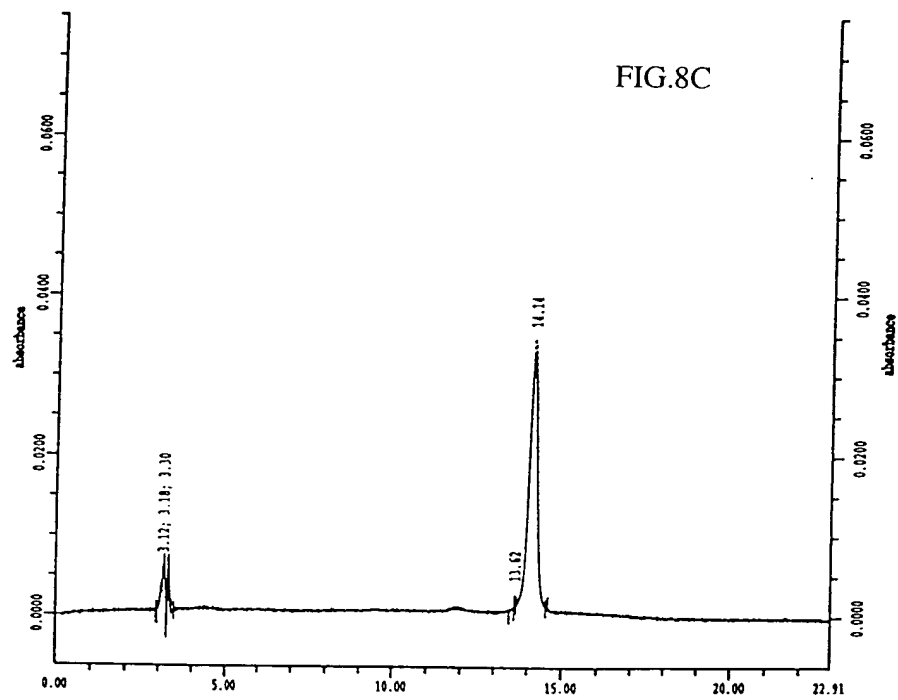


FIG.8C



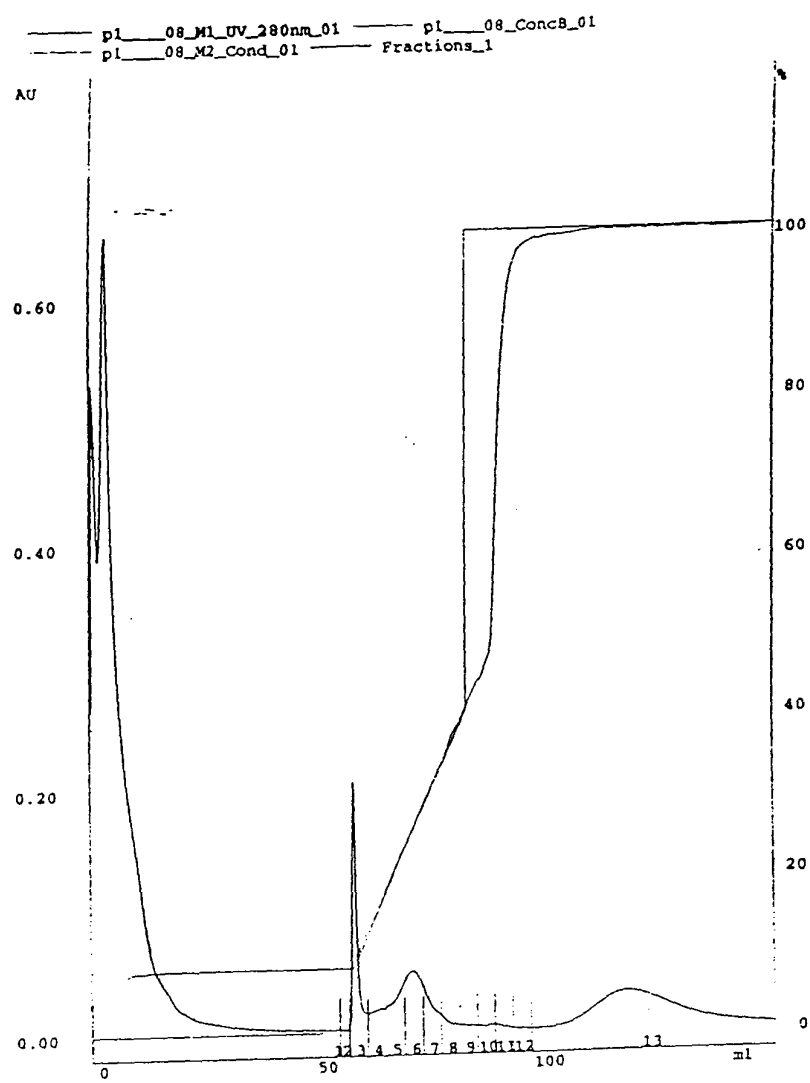
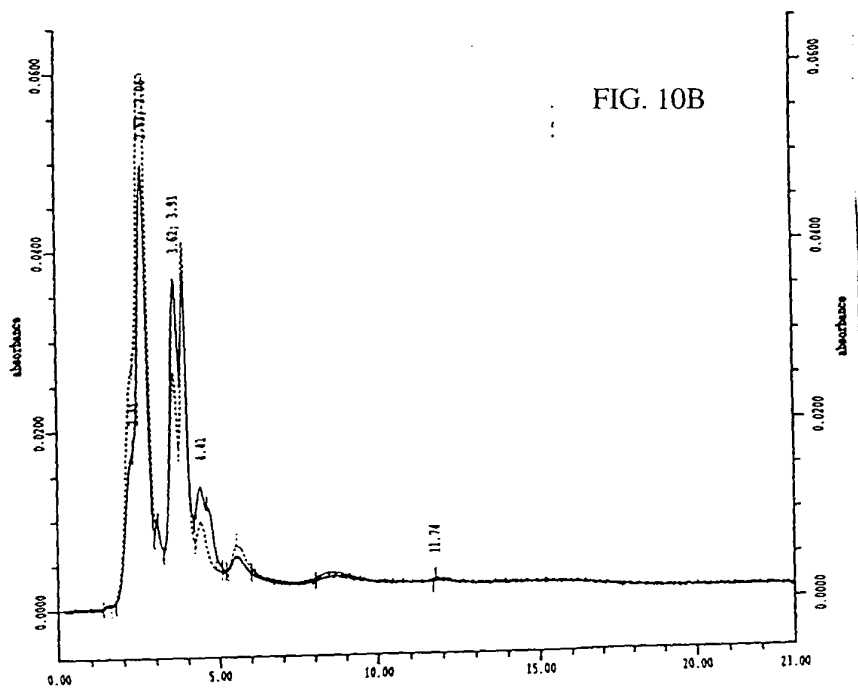
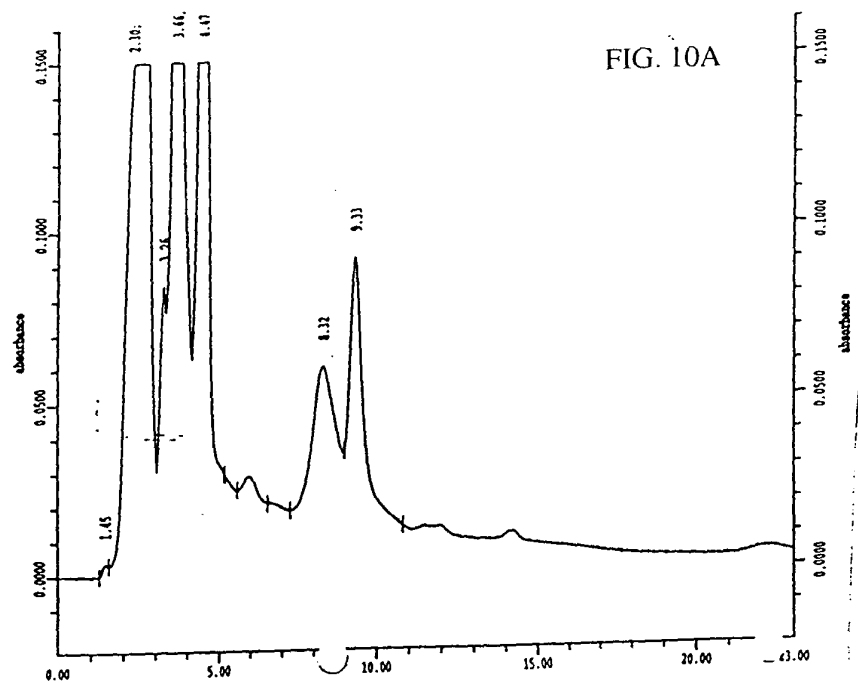
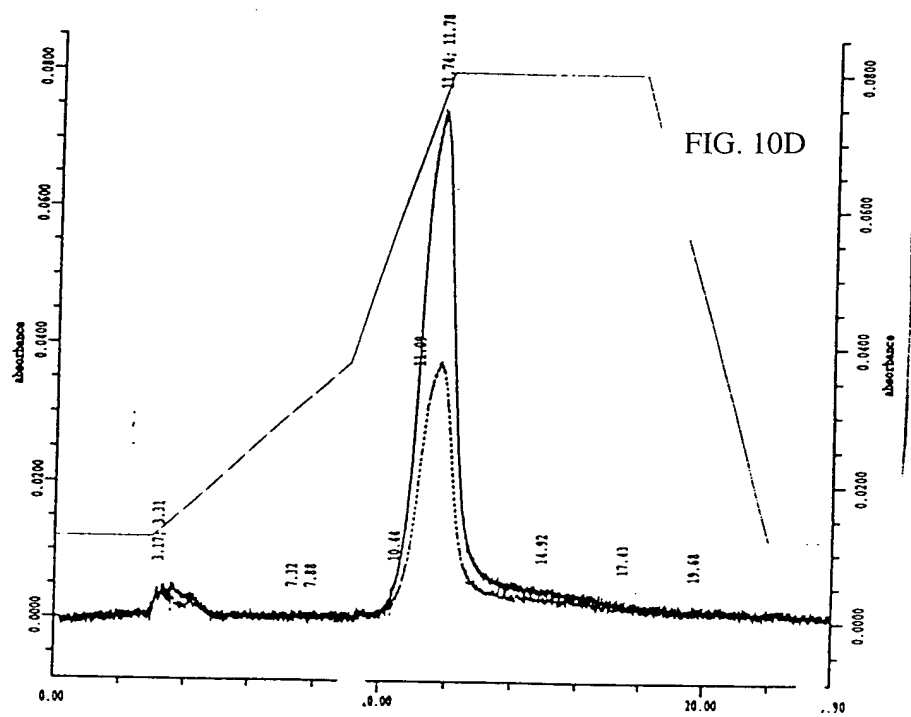
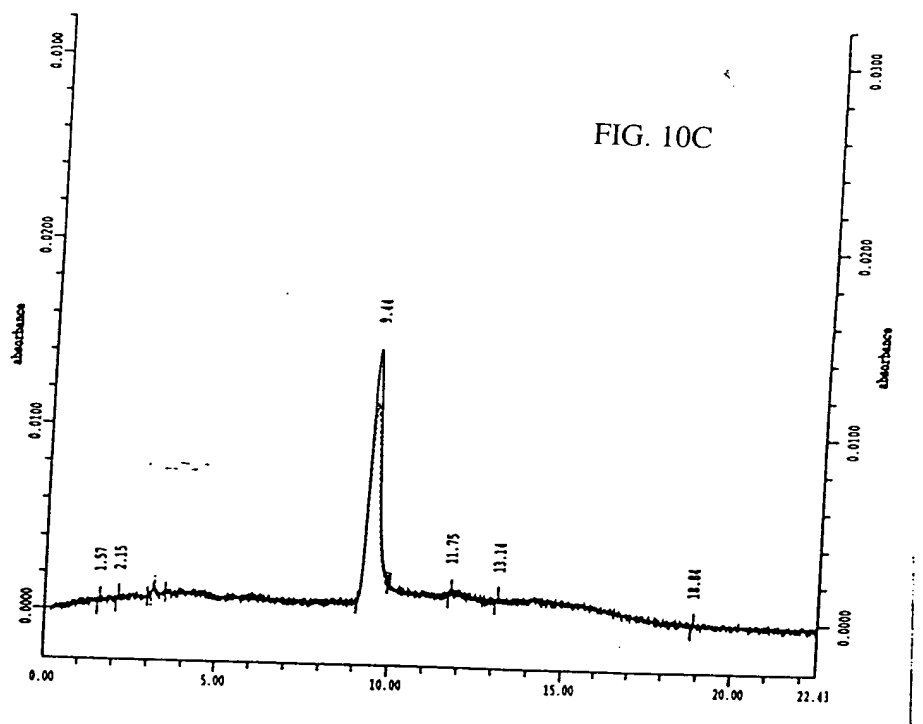
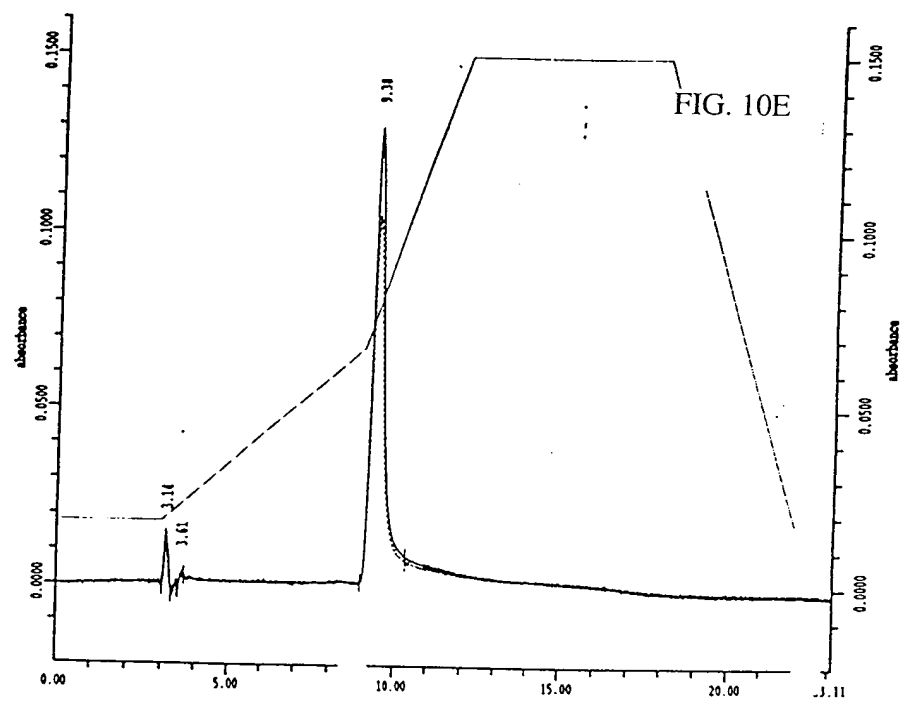


FIG. 9







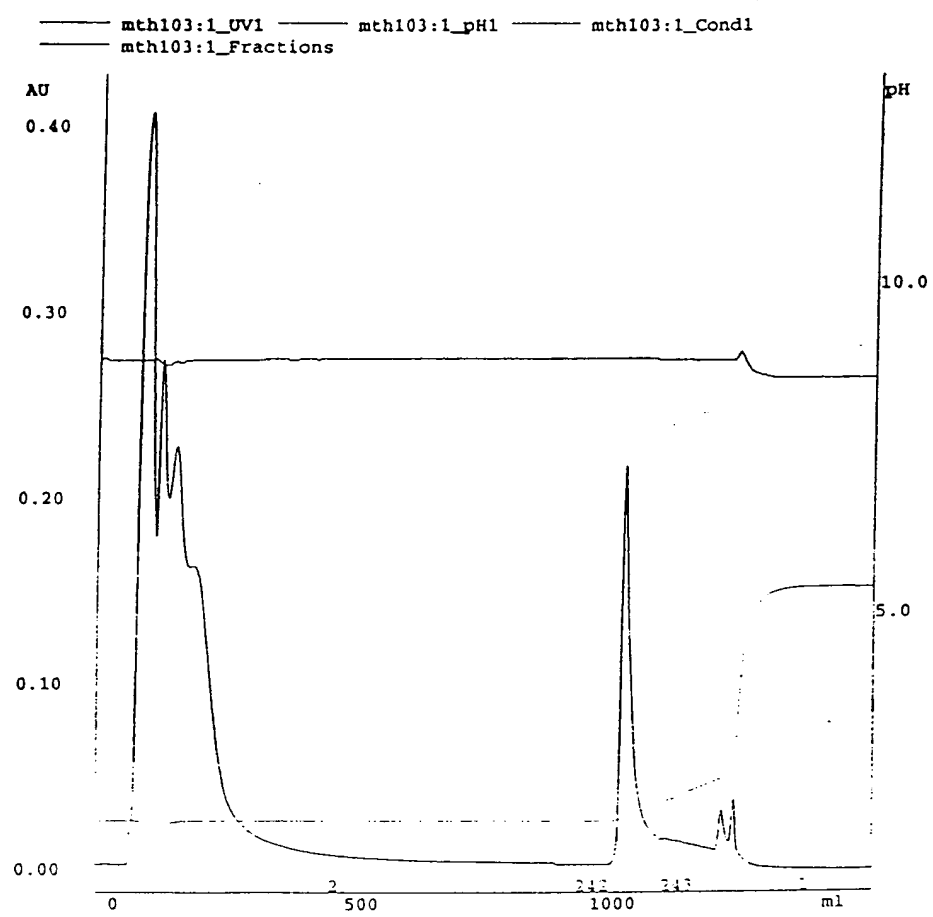


FIG. 11

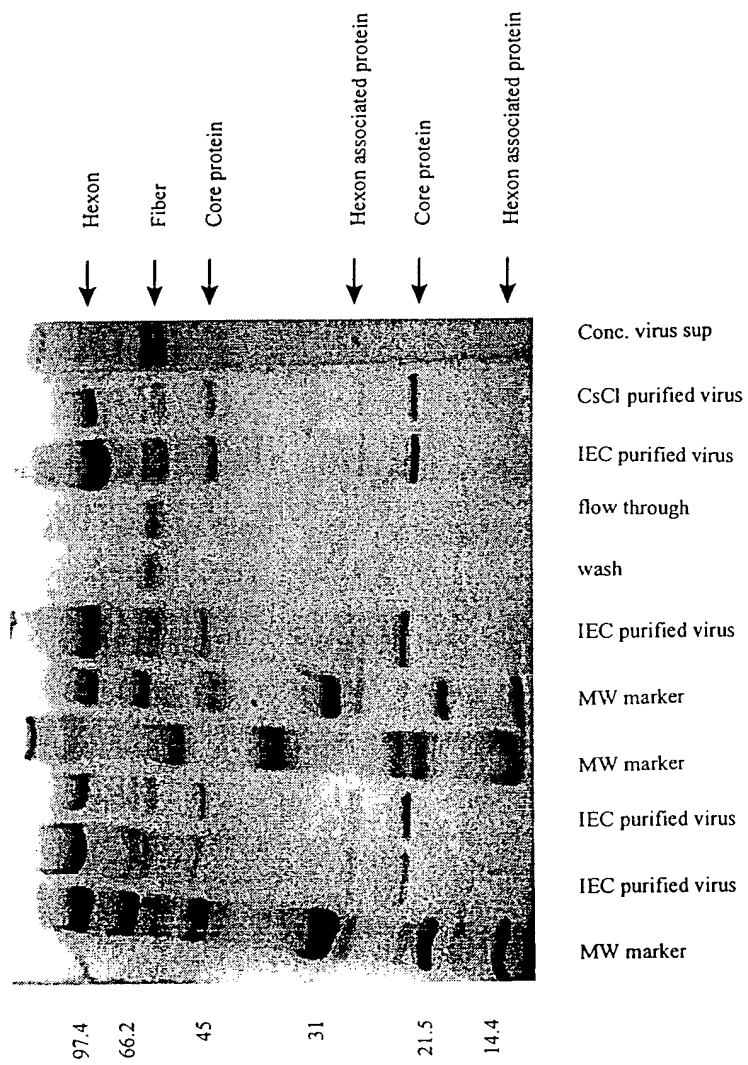


FIG. 12

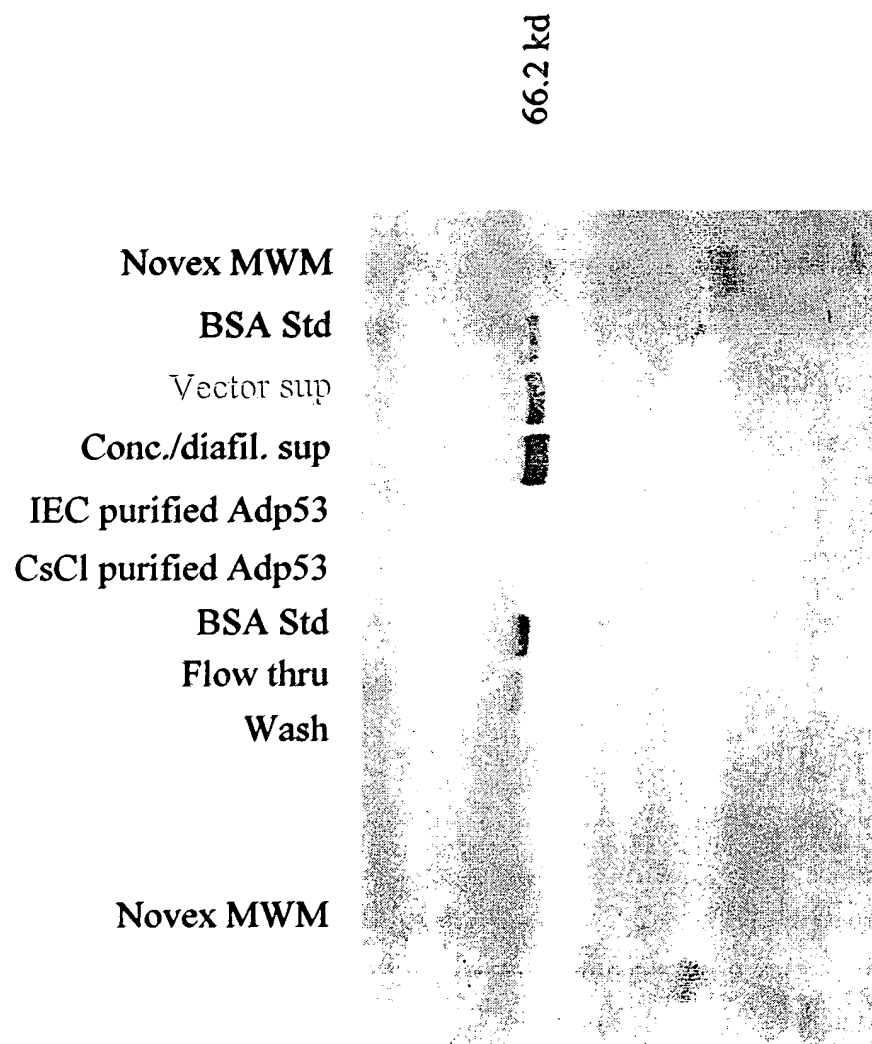


FIG. 13

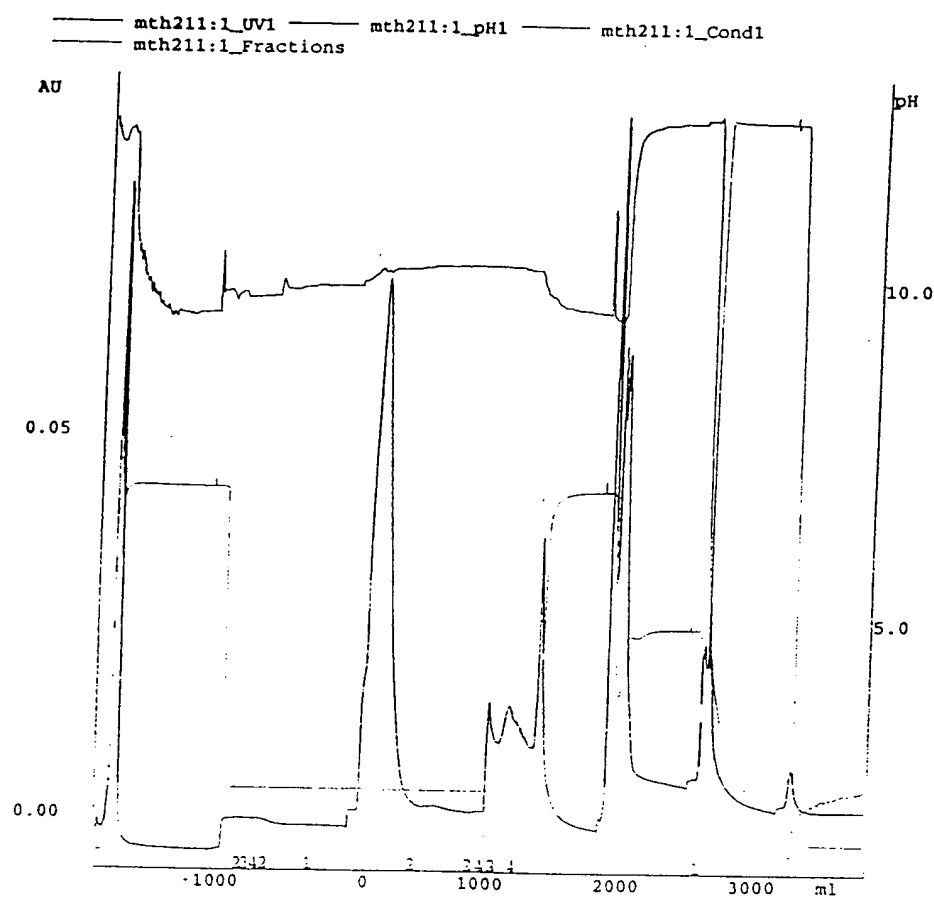


FIG. 14

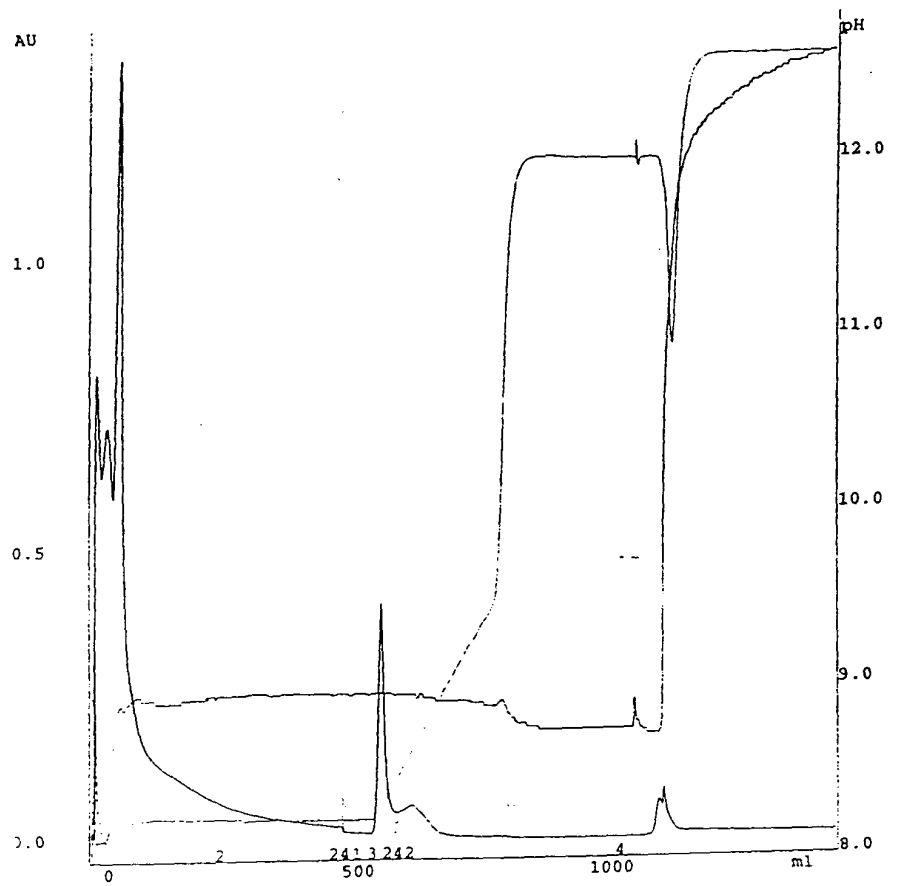
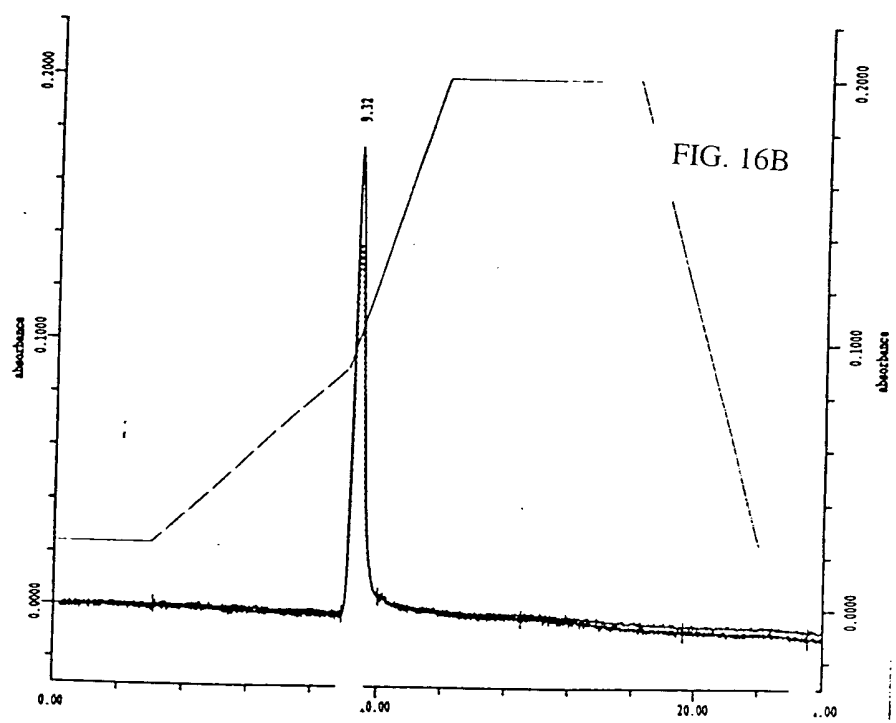
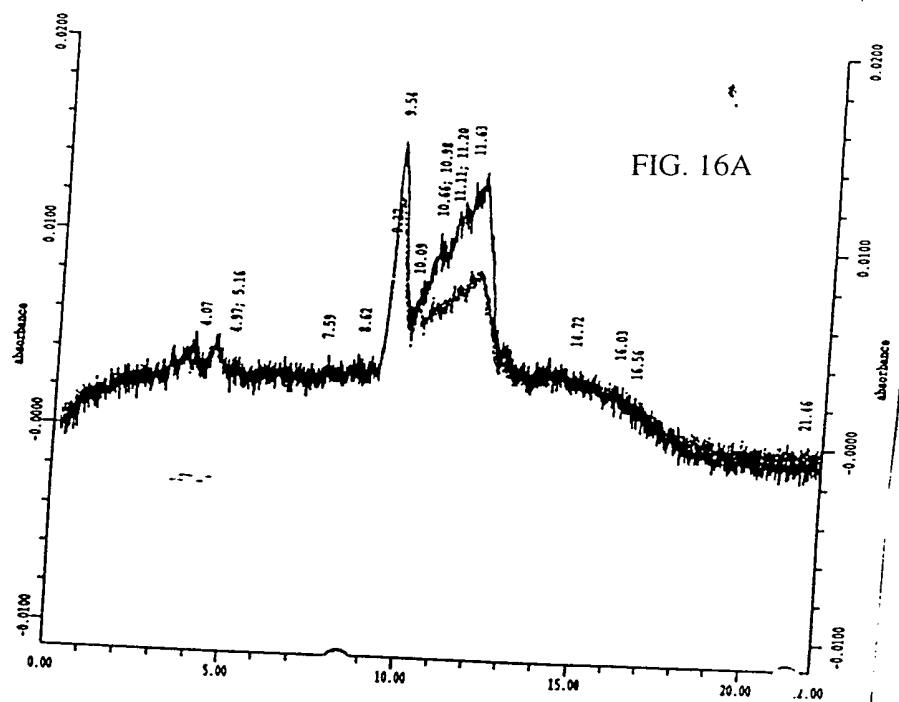


FIG. 15



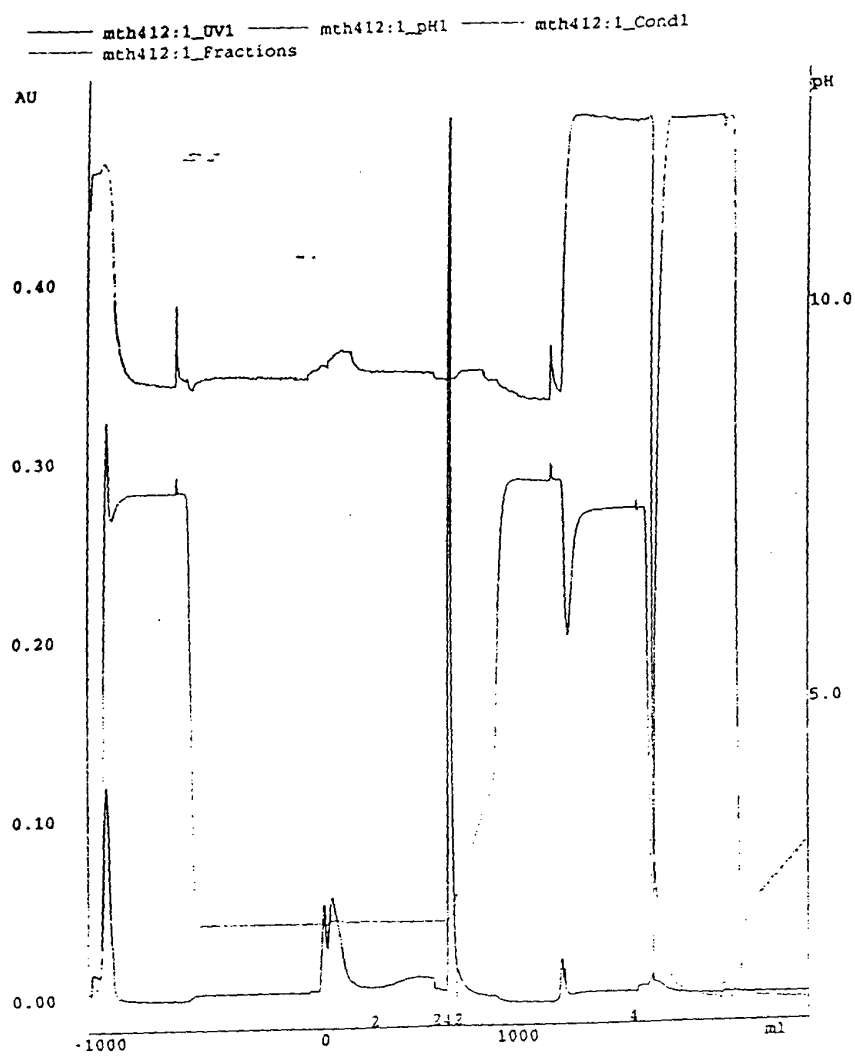


FIG. 17

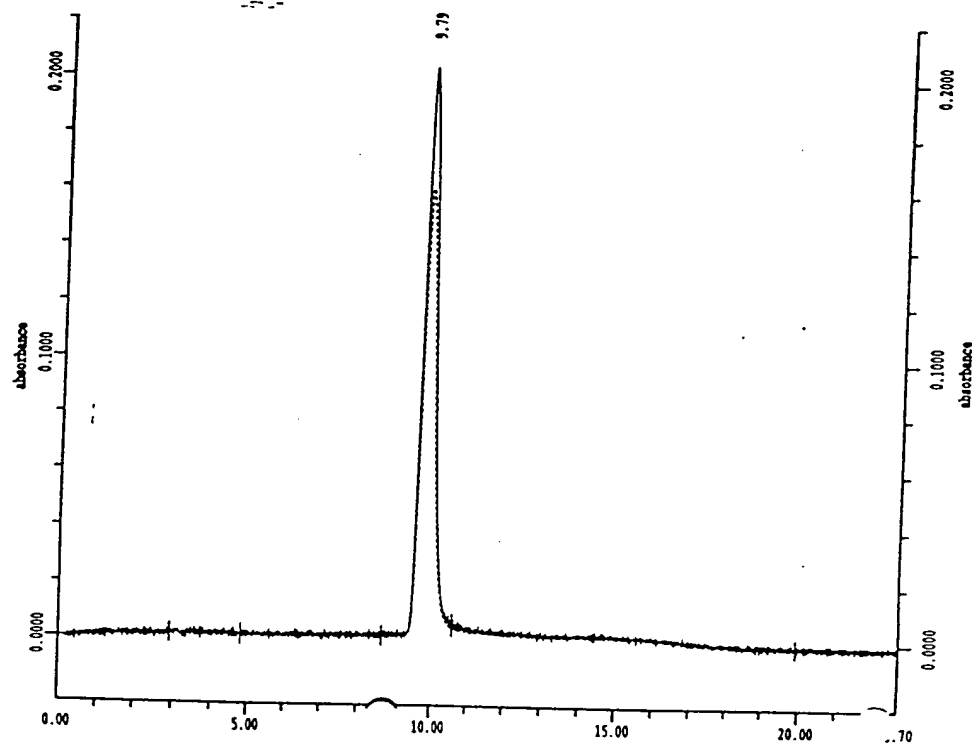
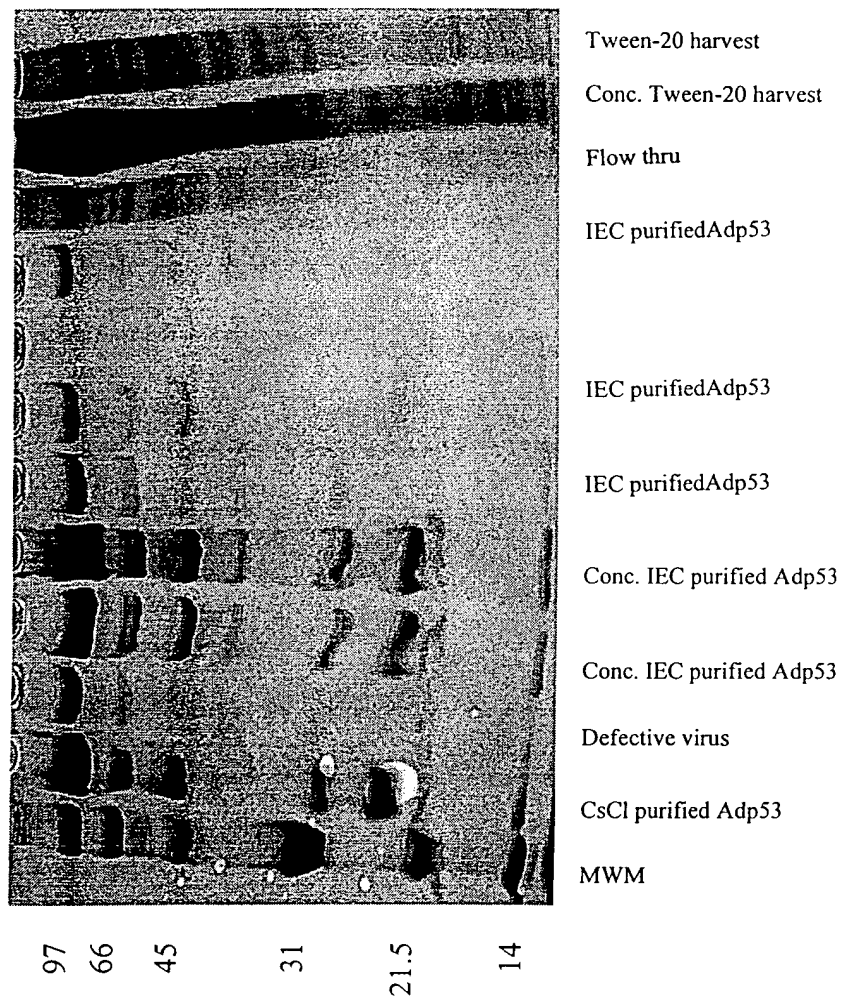


FIG. 18

FIG. 19A



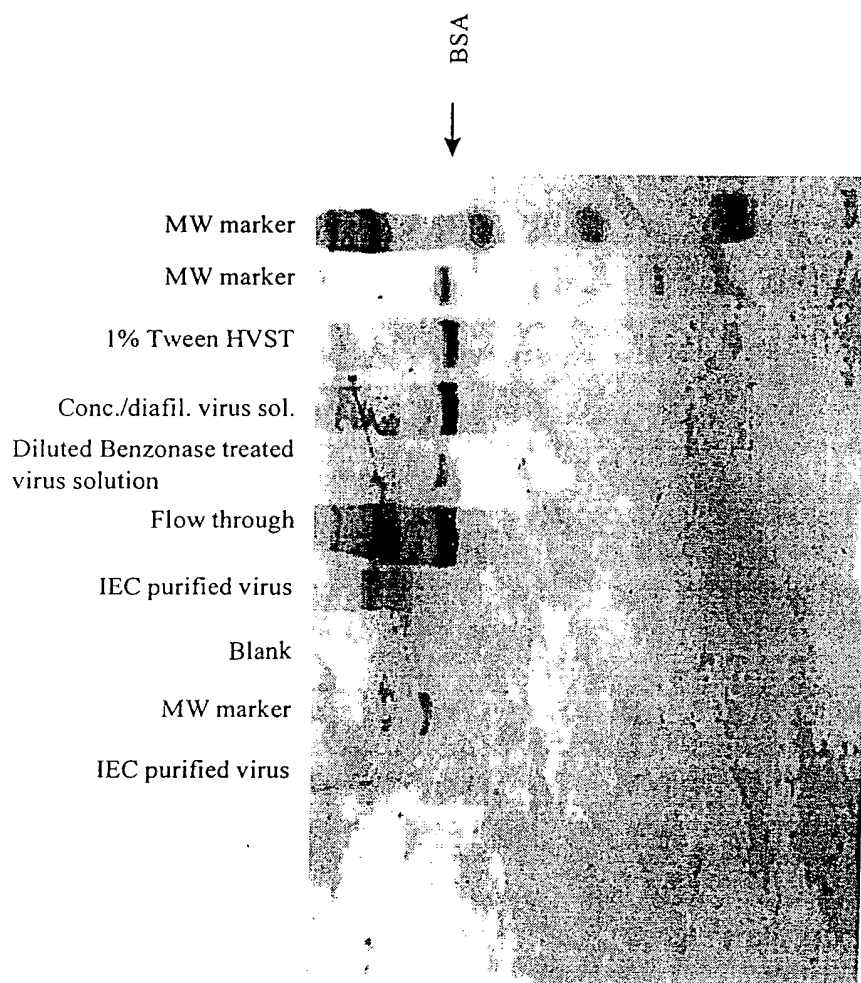


FIG. 19B

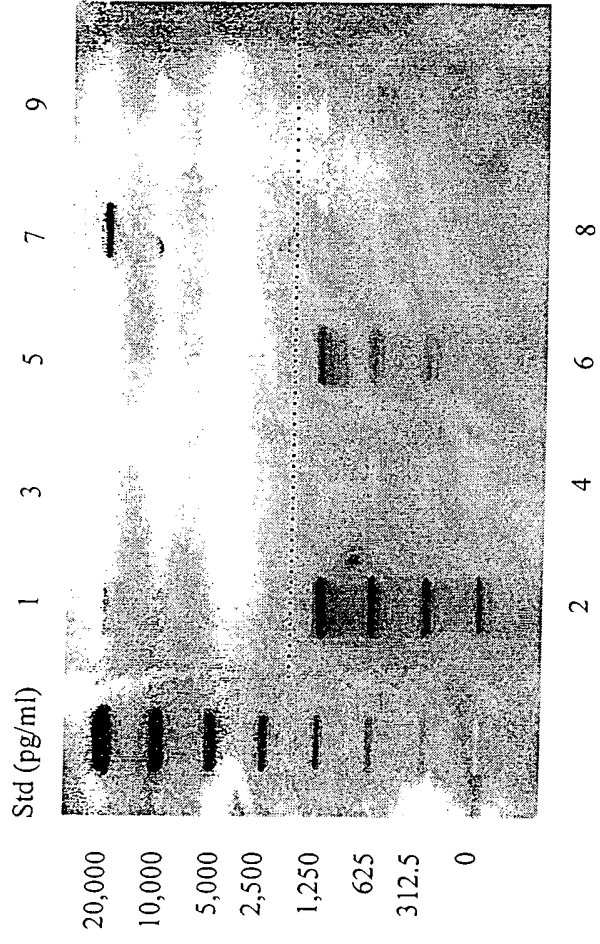
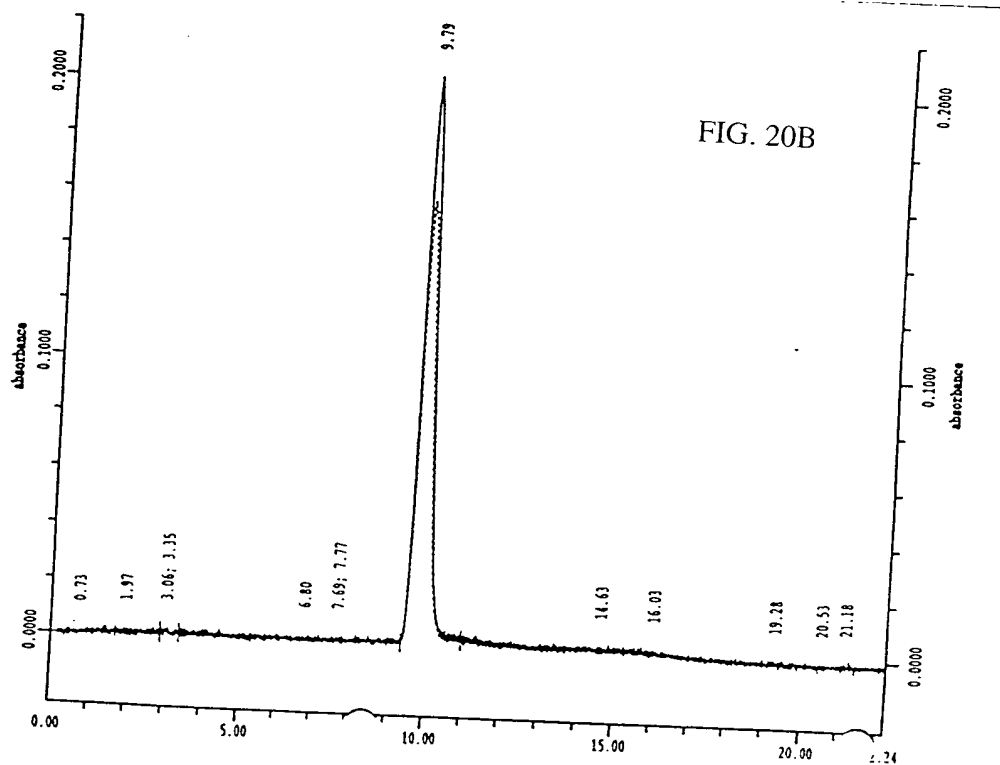
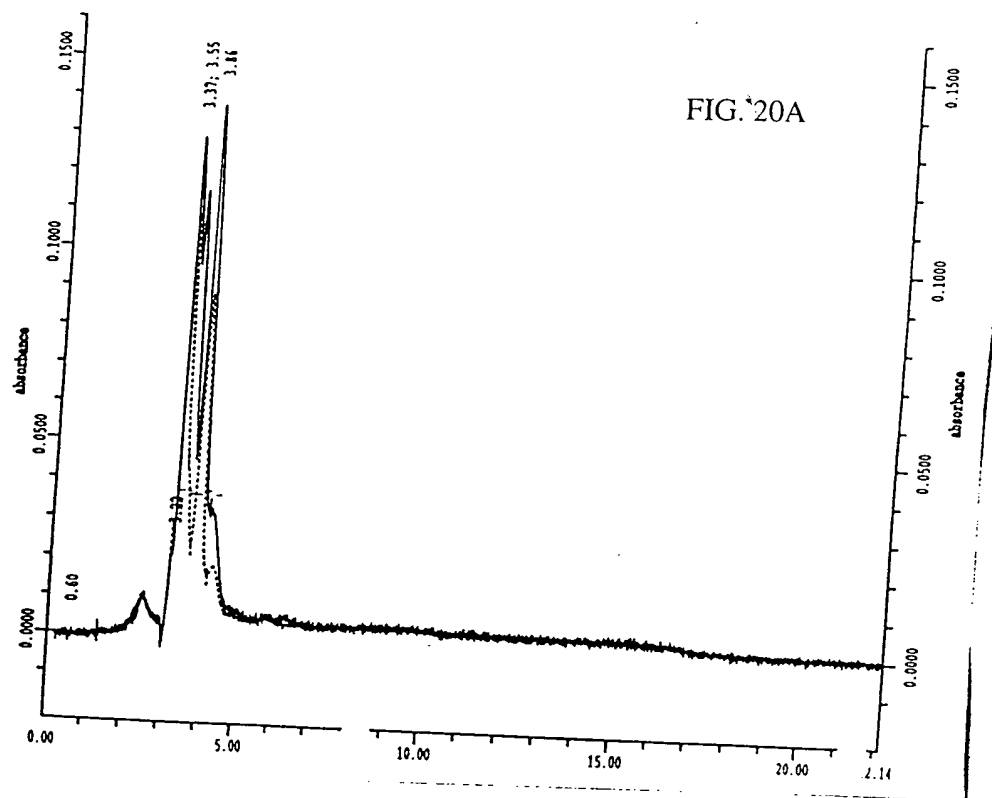
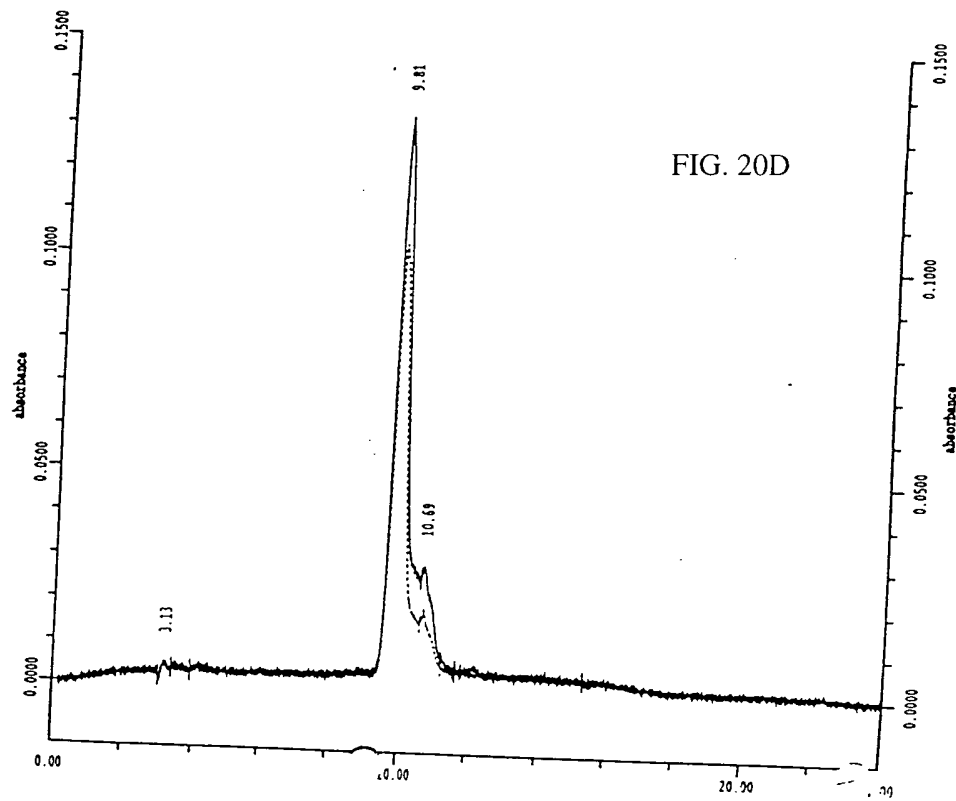
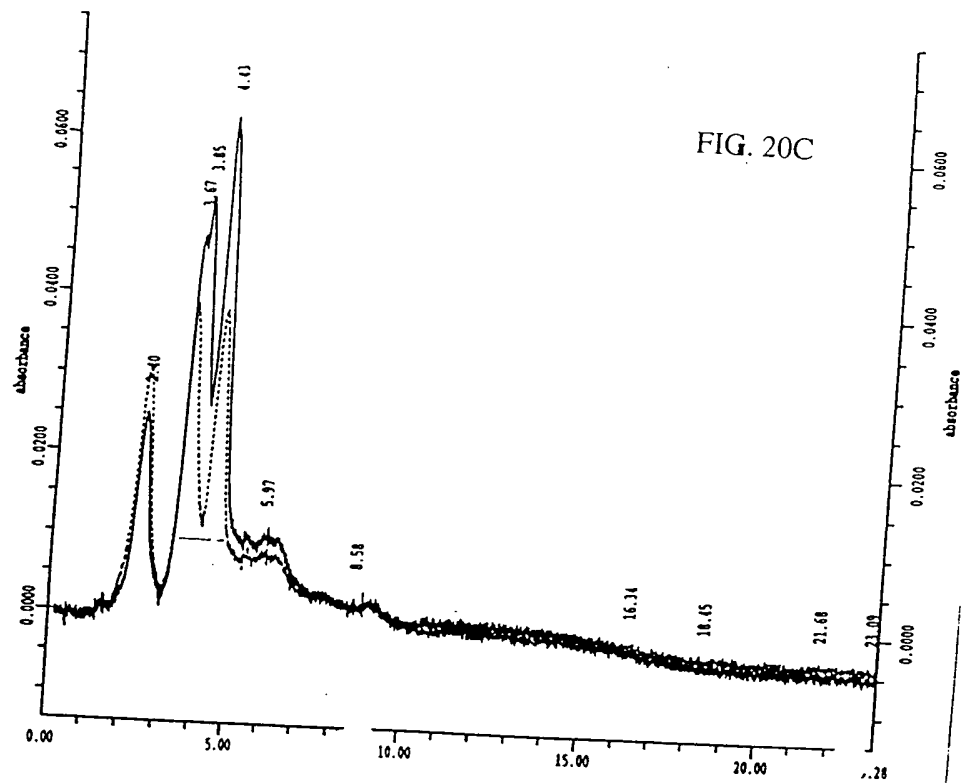
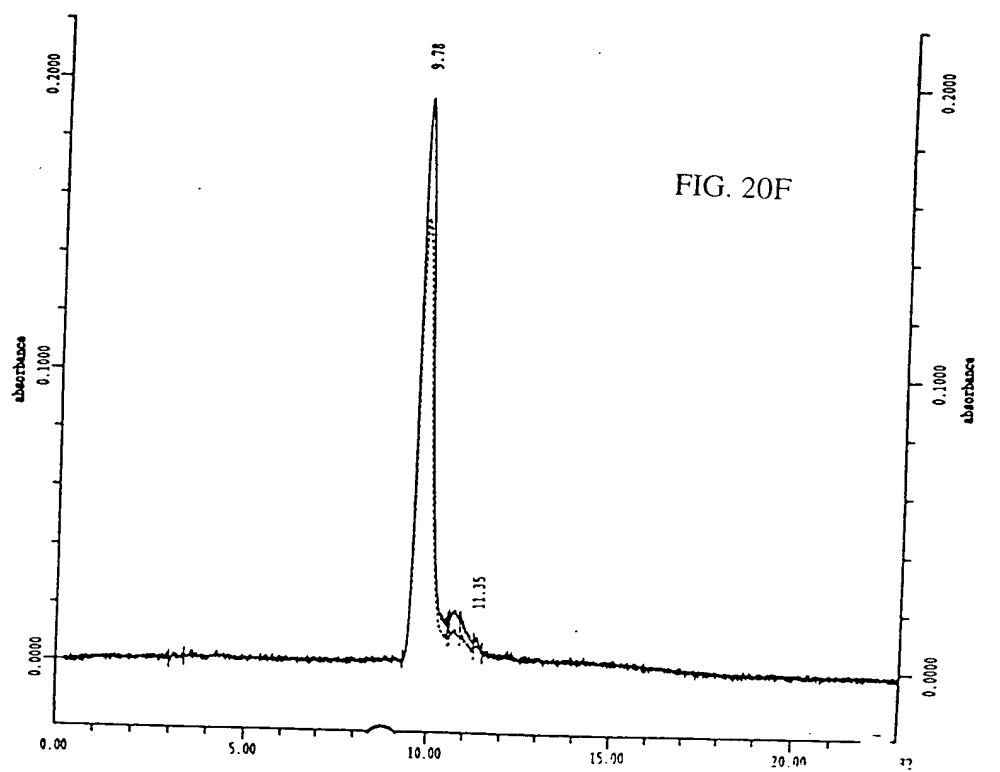
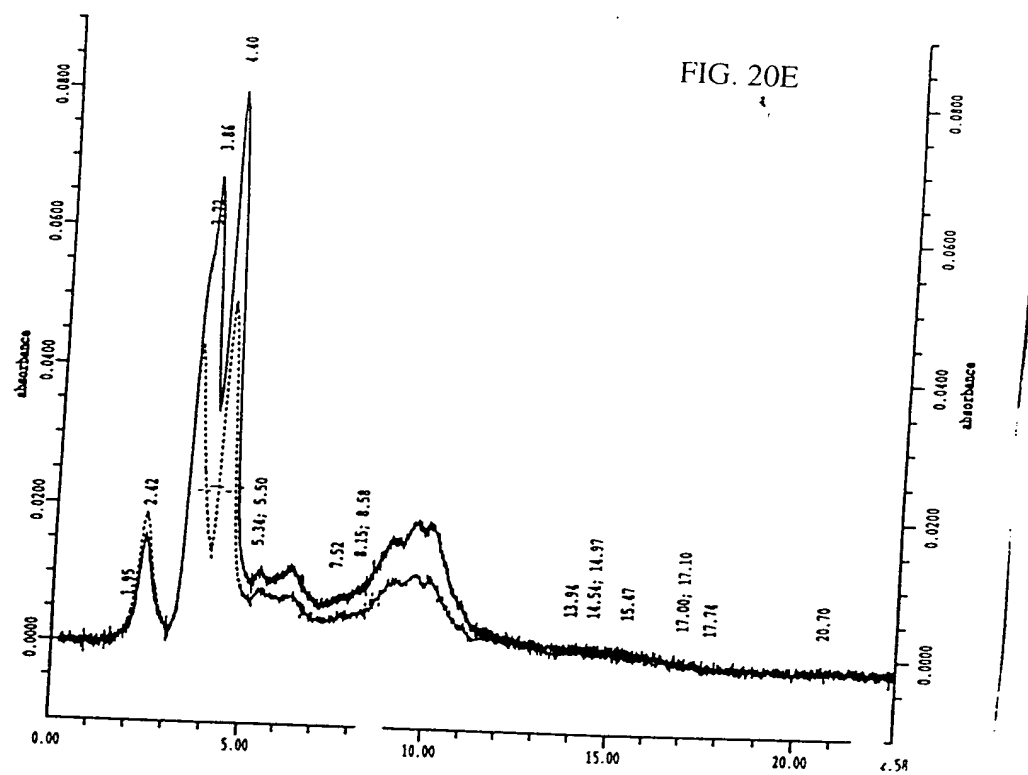


FIG. 19C







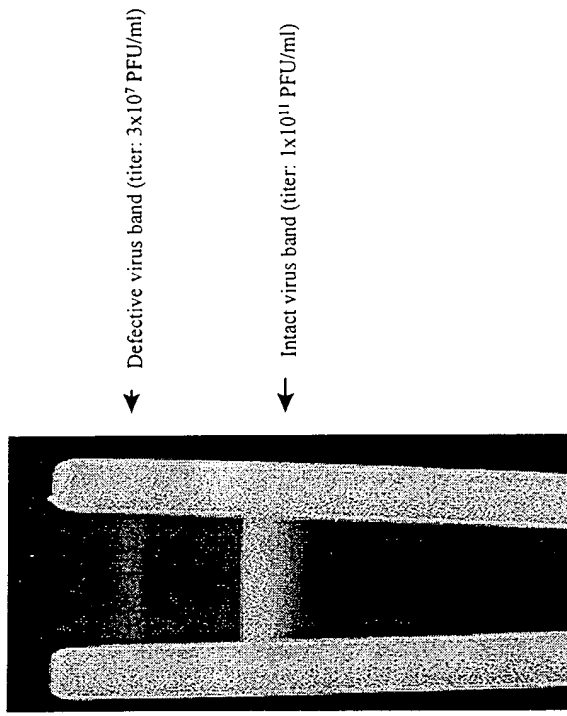
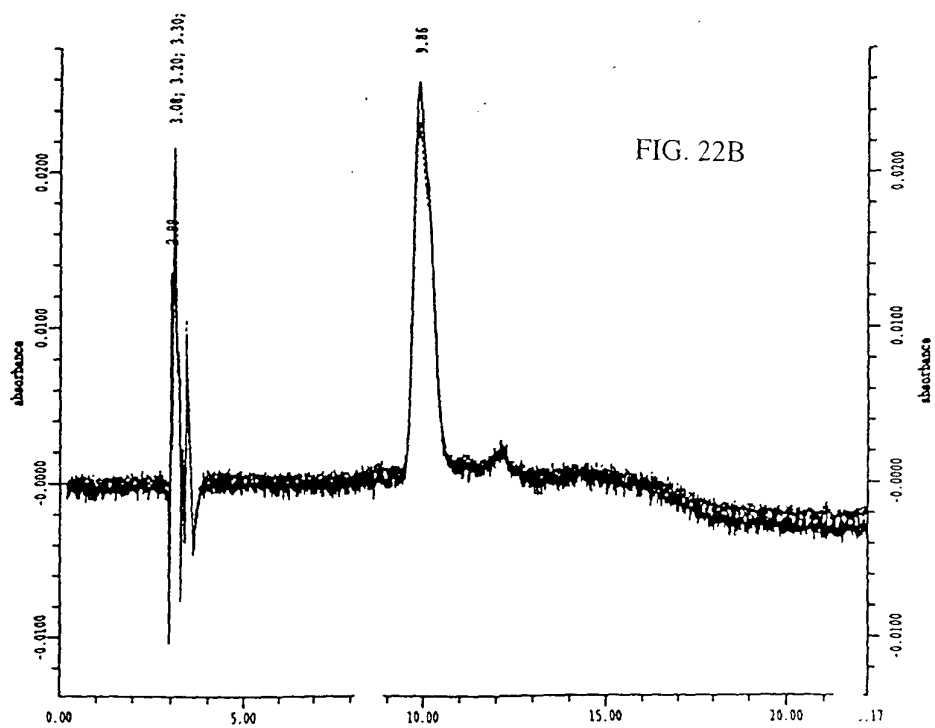
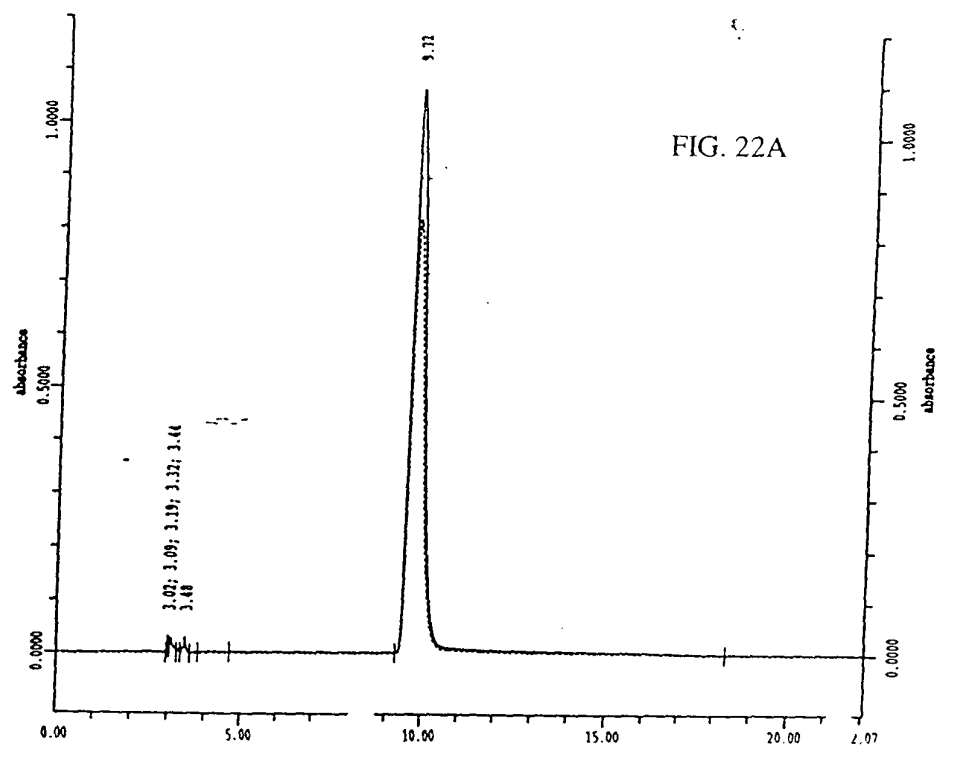


FIG. 21



	Titer (PFU/ml)	Vol. (ml)	Yield (PFU)	Recovery (%)	
				Step	Acc.
Cube (low perfusion rate, keep glucose > 1g/L)					
↓ 1% Tween-20 in buffer A					
Harvest					
↓ Clarification and Filtration (0.22 um)					
Virus solution	$2.6 \times 10^9$	1900	$4.9 \times 10^{12}$		
↓ Conc./diaf. (10-fold conc., diaf. into 1M NaCl buffer A)					
Conc. sup	$2.5 \times 10^{10}$	200	$5 \times 10^{12}$	102%	
↓ Benzonase treatment (O/N, RT, 100u/ml)					
Treated sup					
↓ Dilute with water to conductivity = 22-25 mS/cm					
Diluted virus solution	$7 \times 10^9$	700	$4.9 \times 10^{12}$	98%	100%
↓					
Purified virus	$1.5 \times 10^{10}$	240	$3.6 \times 10^{12}$	73%	73%
↓ conc./diaf (5-fold conc.)					
Final purified product	$7 \times 10^{10}$	50	$3.5 \times 10^{12}$	97%	71%

FIG. 23